

Breidert Air-X-Hauster

PATENT NO. 2269428

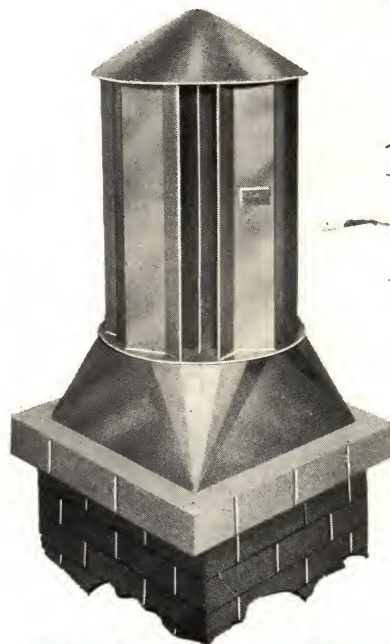
**The greatest scientific improvement in Ventilators
in over 50 years**

SAFE, SURE VENTILATION ...



Vent Flue Caps

NO MATTER WHICH WAY THE WIND BLOWS



Chimney Tops

HIMELBLAU, BYFIELD & CO.
1217 Washington Blvd.
CHICAGO 7, ILL.



Breidert Air-X-Hauster Succeeds where Conventional Vent Flue Caps Fail

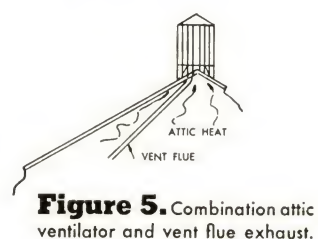
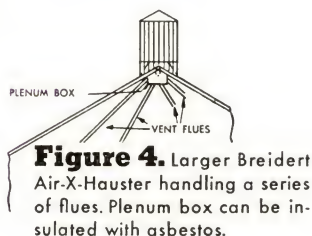
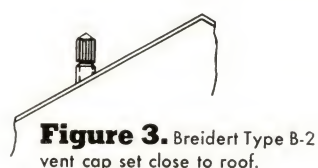
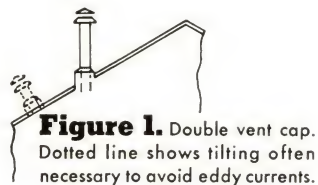
Representing a revolutionary new principle in ventilator design, the Breidert Air-X-Hauster converts the power of air currents blowing in *any* direction into a suction force that achieves standards of ventilating efficiency never before approached.

Totally Different ... In design and operation, the Breidert Air-X-Hauster is unlike any other ventilator on the market. Most ventilators work efficiently only when the wind strikes on a horizontal plane, but the Breidert Air-X-Hauster provides positive ventilation *no matter which way the wind blows*. It remains absolutely stationary ... there are no moving parts to jam or get out of order ... no operating or maintenance expense.

Based on Aerodynamic Principles ... The scientific design of the Breidert Air-X-Hauster is based on the natural principle that air always rushes in to fill a vacuum. Wind currents striking the Breidert Air-X-Hauster from any direction create a vacuum which causes fumes and smoke to be rapidly siphoned out of the stack or chimney. Up or down wind currents do not impair the efficiency of the Breidert Air-X-Hauster.

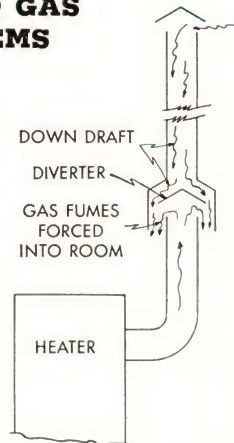
Back-Drafts Eliminated ... It is impossible for the positive suction action of the Breidert Air-X-Hauster to be reversed. *Back-drafts are completely eliminated where there is no interior negative pressure.*

These drawings illustrate the relative appearance of various types of vent flue caps of equal size as used in different parts of the country.



THE ANSWER TO GAS HEATER PROBLEMS

Since gas appliances came into general use, there has been no definite progress made in solving "vent flue" defects with various types of caps and accessories. It is generally known in the Gas Heater Industry that ordinary flue caps usually are satisfactory only under ideal conditions, such as in locations where no high or turbulent winds prevail.



Ordinary caps such as those illustrated at left are often mounted on high stacks, which does not in all cases solve the problem. In addition, the unsightly appearance of the installation may be objectionable, even if performance is satisfactory.

In later years, a new development known as the "down-draft diverter" appeared on the market. This unit is intended only to divert a down-draft out into the room by means of a built-in cap, thus preventing the downward air pressure from blowing out the pilot light. While functioning as described, there is possibility of unburned gas accumulating in the event the pilot light is out, with resulting danger of explosion. Also, there is objection to the odors from the by-products of combustion being blown into the room by the back-draft. These by-products frequently are asphyxiating and may be fatal.

Down-draft diverters should only be used in connection with safety valves which shut off the gas in the event the pilot light blows out. Without this valve, one must be thoroughly familiar with the requirements for relighting the pilot light. Note above sketch illustrating the general design of a down-draft diverter.

Since the Breidert Air-X-Hauster does not down-draft where negative pressure does not exist, it can be seen that a Breidert installed on the vent flue is an absolute safeguard. Unless there is an ordinance in effect compelling the use of down-draft diverters, it costs no more, if as much, to install a Breidert Vent Flue Cap and thus secure positive flue action. The Breidert is also more compact and neat in appearance.

THE
Clothes Shop
For Men and Boys
GLENDALE, CALIF.

October 10, 1940

Mr. G. C. Breidert
634 South Spring Street
Los Angeles 14, California

Dear Mr. Breidert:

It isn't often a manufacturer gets enough -- or any -- praise for his product, and, we feel, that in your particular case you deserve all we say.

We have a terrible place for a ventilator. Have tried several and were still getting a down draft -- from our pressing machine -- filling our store with gas fumes nearly every day. The plumbers blamed the condition upon the six-story building adjoining us. They tried every thing including an "A" vent running up 20 feet above our roof, and we were still getting the gas fumes.

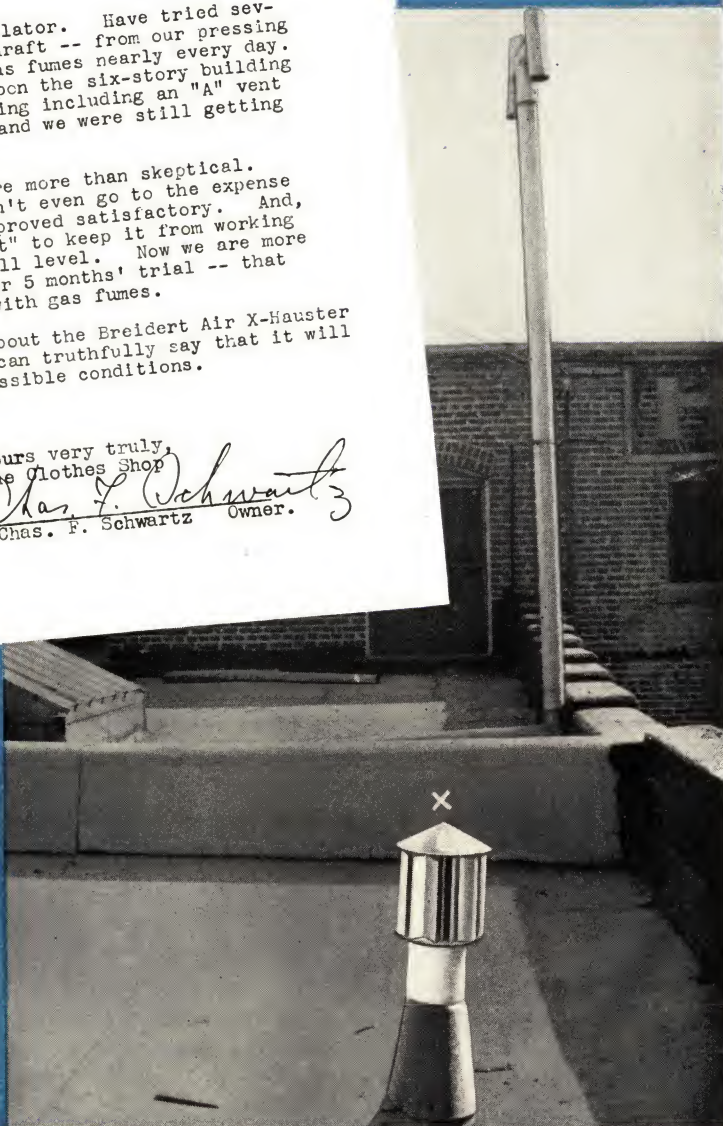
So when we saw your product, we were more than skeptical. Wouldn't think of buying it, wouldn't even go to the expense of having it installed, unless it proved satisfactory. And, we assure you, we did our "darnest" to keep it from working by installing it below our fire wall level. Now we are more than pleased to inform you -- after 5 months' trial -- that never once have we been troubled with gas fumes.

In closing, all that we can say about the Breidert Air X-Hauster is that if it worked for us, you can truthfully say that it will work anywhere, under the worst possible conditions.

Yours very truly,
The Clothes Shop

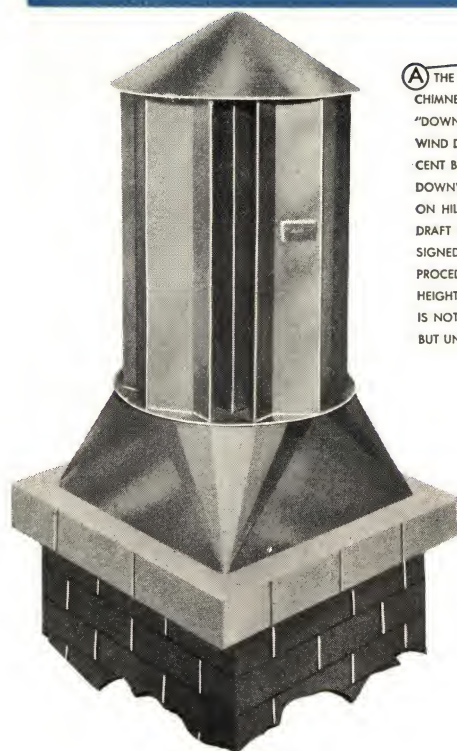
Chas. F. Schwartz
Chas. F. Schwartz Owner.

Photograph of installation in which Breidert Air-X-Hauster, foreground, replaced conventional ventilator mounted on the unsightly 20-foot stack shown in background. The Breidert Air-X-Hauster immediately eliminated annoying back-drafts which had been extinguishing the pilot light. (See letter above.)

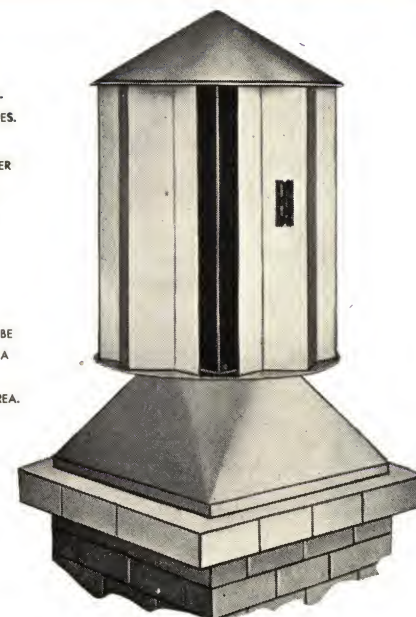
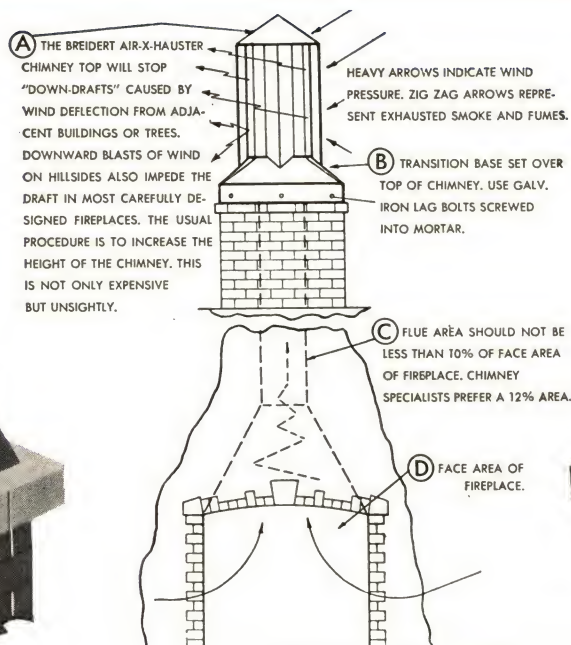


Breidert Air-X-Hauster for Chimney Tops

Prevents Smoking Fireplace due to Down-Draft



TYPE AB-2



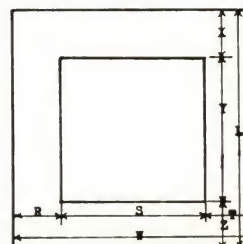
TYPE B-2

The revolutionary principle of the Breidert Air-X-Hauster enables it to overcome down drafts which prevent fireplace, incinerator, gas boiler and furnace stacks from functioning properly.

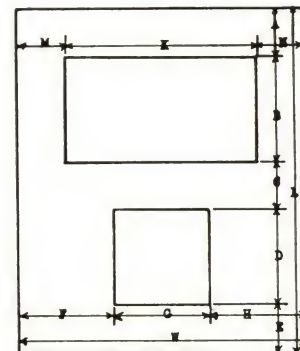
The drawing above shows the proper application of a Breidert Air-X-Hauster on a fireplace chimney. Contributing causes for sluggish flue action are: (a) obstructions or heavy deposit of soot in the flue. (b) accumulation of ashes in fire pit. (c) lack of air supply to the fire. Chimneys will not draw if the room or building has no source of air supply. A window or special air inlet should be opened somewhere in the house to admit air to replace that drawn out by the ventilator.

The size of the ventilator required is governed by the size of the flue. The area of the ventilator neck should be equal to or slightly larger than the area of the flue. On double flue chimneys a single ventilator can be used. Simply figure the combined area of both flues and select a proper size ventilator. In the figure at the right, the area of the flues is equal to $Y \times S$ for the single flue chimney, and to $B \times K$ and $D \times G$ added for the double flue chimney. Select the standard size Breidert Air-X-Hauster chimney top having a neck area next larger than the area of the flues to be covered. See page 8 of this folder for ventilator neck areas.

Breidert Air-X-Hauster chimney tops are made in even sizes 8" to 18" inclusive, with bases to fit the chimney. All chimney tops are made of 20 gauge or equivalent thickness sheet metal. Bases are not included as an integral part of the chimney tops. If bases are required, be sure to give all dimensions shown in the sketch below pertaining to the chimney on which the Breidert chimney top is to be installed.



Cross Section
Single & Double Flue
Chimney Construction



Drawings above reveal through cross section the construction of single and double flue chimneys.

**Over a Half Century without Proper Draft
until...the Chimney Draft Problem was solved
by the Breidert Air-X-Hauster!**



Type B-2 Breidert Air-X-Hauster Chimney Top on apartment house in Beacon Hill section of Boston.

Paul Revere House, on North Street in Boston, Mass., was built originally between 1650 and 1670. Paul Revere, renowned American patriot, lived here from 1770 to 1800. From this house he started his famous midnight ride to warn the countryside that the British troops were on the move in one of the first actions of the Revolutionary War. The house was restored in 1908 by the Paul Revere Memorial Association.

The circle in the above photograph indicates the Breidert Air-X-Hauster which was recently installed on the chimney top of the Paul Revere House. According to the present caretaker and the owners of the house, a serious down-draft problem in the chimney existed after the adjacent hotel building was erected. The recent installation of the Breidert Air-X-Hauster corrected the trouble.

It is obvious that the chimney is in an unusually difficult location. As in many other cases, hundreds of dollars had been spent on conventional types of chimney tops in an effort to solve the problem.

The letter reproduced on the next page, written by Mr. William B. Revere, grandson of Paul Revere and president of the Paul Revere Memorial Association, tells how the *Breidert Air-X-Hauster* succeeded where other chimney top ventilators had failed! Without inducement, Mr. Revere took the pains to write this personal endorsement of the Breidert Air-X-Hauster.

Many similar unsolicited endorsements and expressions reach the G. C. Breidert Co. from all parts of the country. (See letter from Major Al Williams on page 7 of this folder.)

**Grandson of Paul Revere tells how
Breidert Air-X-Hauster
Solved Down-Draft Problem...**

W. B. REVERE, PRESIDENT
CHAS. F. REARD, TREASURER

PAUL REVERE MEMORIAL ASSOCIATION
19 NORTH SQUARE
BOSTON

July 12, 1944

Williams Sales Co.
Attention of Mr. Jack Leonhardt.

Gentlemen,

In reply to your letter of June 24th I would say that the "Breidert Air X Hauster" which you installed last October at the Paul Revere ^{House} in Boston has worked exactly as represented. Before your chimney top was installed the down draft in the furnace chimney caused the smoke to back up and fill the house, which was not only a great inconvenience to the visitors to the house as well as extra expense, as all the windows had to be opened to clear to atmosphere, then on a cold winter morning was a great detriment & expense. We now have a good draft at all times. It gives me great pleasure to recommend the "Breidert Air X Hauster".

Yours truly

P Revere Memorial Association

William B Revere Pres.

Major Al Williams* enthusiastic about Aero-dynamic Principle of Breidert Air-X-Hauster

**Noted Navy pilot and plane designer, now associated with a leading oil company. Writes syndicated newspaper column on aviation engineering.*

ALFORD J. WILLIAMS
GULF BUILDING
PITTSBURGH, PA.

February 25, 1944

Mr. G. C. Breidert
G. C. Breidert Company
634 South Spring Street
Los Angeles (14), California

Dear Mr. Breidert:

I am delighted with the Breidert Air-X-Hauster model you sent me. When I first learned of this device of yours, I was tremendously impressed and started to tell my friends the interesting story of an engineer who believed that "the problems of ventilation are now solved by the science of aerodynamics."

I had no idea in the world that chimney stack and ventilation involved so many and such complex problems until I ran smack into a beautiful set of such problems with my own home in the country. I have had a devil of a time. I tried all sorts of devices, ranging all the way from a crusader's helmet to a Rube Goldberg brainchild.

I discovered your Air-X-Hauster by visiting a friend in town here, inquiring about a hot water heater. He happened to have one of your booklets lying open on the far side of his desk. All I could see from a distance was arrows, indicating air flow. As soon as we finished our immediate conference I pointed across the desk saying, "What's that?" "That looks like aerodynamics." He answered, "It concerns air flow".

As soon as I saw what the diagrams meant, I got busy right away and got in touch with your Mr. Daum -- and from there on corresponded with you.

I think you have a grand idea in the Air-X-Hauster. It is one of the cleverest adaptations of what we already know about the aerodynamics of air flow. And I offer you my sincere congratulations upon the enterprise with which you adapted air flow principles to ventilation.

I am having a lot of fun with your model around the building. And I am going to sell a lot of Breidert Air-X-Hausters -- not only in the country where my home is located, but right here in Pittsburgh. These birds are fifty years behind times, and it tickles me no end -- first, to joke them out of their complacency, and secondly, to thus do honor to an alert, enterprising American, who deserves recognition.

I await with interest the delivery of the Air-X-Hausters which I have ordered for the vent flues in my own home.

Thanking you again for sending me the model and for providing me with considerable mental entertainment.

AJW/M

Sincerely

Al Williams
AL WILLIAMS

Since writing the above unsolicited testimonial, Major Williams has stated in speaking of the Breidert Air-X-Hauster: "The problems of chimney building and prevention of back-drafts are complex, and the best way to appreciate them is to look out your office window and note the great variety of chimney vents. I have spent hundreds of dollars trying to

lick defective chimney design and promote enough draft (without back-draft) to keep fires going. Just note the variety of chimney stack tops and you will realize that no one seemed to have the answers and everyone was trying. I pounced on this aviation version of a chimney stack*, bought one and it worked like a charm."

**Breidert Air-X-Hauster*

BREIDERT AIR-X-HAUSTERS

FOR VENT FLUE CAPS

FOR CHIMNEY TOPS

SIZE OF VENT	GAUGE OF IRON	APPROX. SHIP. WGT.	SIZE OF VENT	AREA OF NECK SQ. IN.	GAUGE OF IRON	APPROX. SHIP. WGT
3"	26-22	3 lbs.	8"	50.3	20	20 lbs.
4"	26-22	4 "	10"	78.5	20	30 "
5"	26-22	7 "	12"	113.1	20	50 "
6"	26-22	8 "	14"	153.9	20	75 "
7"	24	11 "	16"	201.1	20	130 "
8"	24	14 "	18"	254.5	20	155 "
10"	24	20 "	LARGER SIZES AVAILABLE			

12x16 + 4 cone, ✓

Vent flue caps are made of cold rolled steel with zinc chromate and aluminum paint finish, of sheet aluminum, or of galvanized sheet steel, as conditions determine. Prices on request for special metals including copper, stainless steel, Allegheny metal, and others as available.

NOTE—Area of chimney tops should not be less than free area of flue. Use round to square transition base for Type B. Chimney tops made in special designs for desired appearance. Information on request.

G. C. BREIDERT CO.

MANUFACTURERS OF BREIDERT AIR-X-HAUSTERS

Offices: 3129 San Fernando Road, Los Angeles 41, Calif.

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From the collection of:

Mike Jackson, FAIA

Breidert Air-X-Hauster

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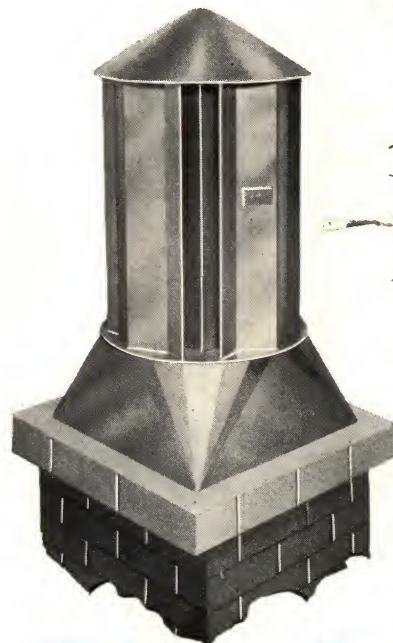
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